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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/706,652

11/12/2003

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EXAMINER

MONBLEAU, DAVIENNE N

ART UNIT

PAPER NUMBER

2878

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/706,652

Applicant(s)

KOUDIELKA ET AL.

Examiner

Davienne Monbleau

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/19/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The IDS filed on 3/19/04 has been acknowledged and a signed copy of the PTO-1449 is attached herein.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Photomultiplier Power Supply with Primary and Secondary Transformer Windings.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the primary transformer winding must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Additionally, the following features of the invention specified in the claims are not numbered in the figures: anode and cathode of the first and second diode, the positive and negative terminals of the power supply cell, the photocathode, first and second dynodes, and resistor. These features should be correctly numbered within the figures to clearly illustrate the claimed invention.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing

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should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Figure 7 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 1 line 3 recites "a plurality of power supply cells comprising". This should be changed to -- a plurality of power supply cells, wherein each cell comprises: -- to make it clear that each cell contains the circuit elements.

Claim 1 recites the limitation "the high side" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the high side" in line 7. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the low side" in line 9. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the anode" in line 11. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 line 12: "second ide" should be changed to -- second side -- .

Claim 1 recites the limitation "the cathode" in line 13. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the positive terminal" in line 14. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the negative terminal" in line 14. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the negative terminal" in line 16. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the first cell" in line 16. There is insufficient antecedent basis for this limitation in the claim.

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Claim 1 recites the limitation "the first center tap" in lines 16-17. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the first cell" in line 18. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the series" in line 19. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 line 19 recites the limitation "repeated until a resistor connected in series with an anode terminal is reached". It is not clear which circuit component the anode is associated with.

Claims 2-4, 6-8, 10-12, and 14-16 recite the limitation "the voltage ratio". There is insufficient antecedent basis for this limitation in the claim.

Claims 2-4, 6-8, 10-12, and 14-16 recite the limitation "tube elements", but it is not clear what tube elements are or if it is referring to the previously mentioned circuit components.

Claims 3, 4, 7, 8, 11, 12, 15, and 16 recite the limitation "the secondary coil". There is insufficient antecedent basis for this limitation in the claim.

Claim 5 line 4: "a high side" should be changed to -- to a high side -- .

Claim 5 line 7: delete -- connected -- .

Claim 5 recites the limitation "the connection series" in line 17. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 lines 17-18 recites the limitation "repeating the connection series until a resistor connected in series with an anode terminal is reached". It is not clear to which circuit component the anode is associated with.

Claim 9 line 2: insert -- a -- after "having".

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Claim 9 line 9 recites "a plurality of power supply cells comprising". This should be changed to -- a plurality of power supply cells, wherein each cell comprises: -- to make it clear that each cell contains the circuit elements.

Claim 9 recites the limitation "the high side" in line 11. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the high side" in line 13. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the low side" in line 15. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the anode" in line 17. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 line 18: "second ide" should be changed to -- second side -- .

Claim 9 recites the limitation "the cathode" in line 19. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the positive terminal" in line 20. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the negative terminal" in line 20. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the negative terminal" in line 22. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the first cell" in line 22. There is insufficient antecedent basis for this limitation in the claim.

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Claim 9 recites the limitation "the first center tap" in lines 22-23. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the first cell" in line 24. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the series" in line 25. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 line 25 recites the limitation "repeated until a resistor connected in series with an anode terminal is reached". It is not clear which circuit component the anode is associated with.

Claim 13 line 2: insert -- a -- before "photomultiplier".

Claim 13 line 8: "a high side" should be changed to -- to a high side -- .

Claim 13 line 12: delete -- connected -- .

Claim 13 recites the limitation "the connection series" in line 23. There is insufficient antecedent basis for this limitation in the claim.

Claim 13 lines 23-24 recites the limitation "repeating the connection series until a resistor connected in series with an anode terminal is reached". It is not clear which circuit component the anode is associated with.

Allowable Subject Matter

Claims 1-16 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding Claims 1-8, the cited prior art of record does not teach or fairly suggest a photomultiplier power supply comprising, along with the other claimed features, a primary

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transformer winding and a plurality of power supply cells, wherein each cell comprises a secondary winding, first and second diodes, and first and second capacitors.

Regarding Claims 9-16, the cited prior art of record does not teach or fairly suggest a system for providing power to a photomultiplier for measuring at least one of counts and pulse heights using a down hole tool having a photomultiplier tube and photomultiplier power supply comprising, along with the other claimed features, a photomultiplier power supply that has a primary transformer winding and a plurality of power supply cells, wherein each cell comprises a secondary winding, first and second diodes, and first and second capacitors.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure because they teach various configurations of power supply circuits for a photomultiplier tube. However, the cited prior art of record teach the claimed circuit combination wherein each power supply cell has a secondary winding connected to first and second diodes and first and second capacitors.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davienne Monbleau whose telephone number is 571-272-1945. The examiner can normally be reached on Mon-Fri 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Danielle Monbleau
DNM

Stephane B. Allen
Stephane B. Allen
Primary Examiner